Please cancel claims 2 and 5 without prejudice or disclaimer, and amend claims 1, 3-4 and 6 as follows:

1.    (Currently Amended) A method of calculating the frequency of appearance of a keyword, using a first database in which information about a base sequence or an amino acid sequence is stored and a second database in which document data is stored, said method comprising:

a first ~~text data~~ document extraction step for extracting a first ~~text data~~ document from said first database which contains a base sequence or an amino acid sequence of a gene or protein of interest inputted by a user;

an identifier extraction step for extracting an identifier identifying document data in said first ~~text data~~ document from said extracted first ~~text data~~ document which contains the base sequence or the amino acid sequence;

a second ~~text data~~ document extraction step for extracting a second ~~text data~~ document from said second database which contains said extracted identifier;

an appearance frequency calculation step for sequentially reading keywords from a keyword table containing keywords of known functions or characteristics of genes or proteins from said first database, and for calculating a frequency of appearance of each of said keywords by counting a number of second documents containing said keywords in said extracted second ~~text data~~ documents; and

a displaying step for displaying a frequency of appearance of each of said keywords in a corresponding position in said keyword table,

wherein said keyword table has a tree structure in which keywords are stored such that they are classified according to categories, and

wherein said appearance frequency calculation step comprises a step for generating a frequency calculation result table of a tree structure, said table containing the frequency of appearance of a keyword and the frequency of appearance of an upper-level category to which the keyword belongs.

2.    (Cancelled)

3.    (Currently Amended) The keyword frequency calculating method according to claim 1, wherein said first text data extraction step comprises a step for extracting a first ~~text~~

~~data~~ <u>document</u> from said first database for each of a plurality of sequences entered by the user.

4. (Currently Amended) A program embedded in a storage medium for causing a computer to carry out a keyword frequency calculation method of calculating the frequency of appearance of a keyword, using a first database in which information about a base sequence or an amino acid sequence is stored and a second database in which document data is stored, said program comprising:

a first ~~text data~~ <u>document</u> extraction module for extracting <u>a</u> first ~~text data~~ <u>document</u> from said first database which contains a base sequence or an amino acid sequence of a gene or protein of interest inputted by a user;

an identifier extraction module for extracting an identifier identifying document data in said first ~~text data~~ <u>document</u> from said extracted first ~~text data~~ <u>document</u> which contains the base sequence or the amino acid sequence;

a second ~~text data~~ <u>document</u> extraction module for extracting <u>a</u> second ~~text data~~ <u>document</u> from said second database which contains said extracted identifier;

an appearance frequency calculation module for sequentially reading keywords from a keyword table containing keywords of known functions or characteristics of genes or proteins from said first database, and for calculating a frequency of appearance of each of said keywords <u>by counting a number of second documents containing said keywords</u> in said extracted second ~~text data~~ <u>documents</u>;

<u>a module for providing said keyword table with a tree structure in which keywords are stored such that they are classified according to categories;</u> and

a displaying module for displaying a frequency of appearance of each of said keywords in a corresponding position in said keyword table<u>,</u>

<u>wherein said appearance frequency calculation module generates a frequency calculation result table of a tree structure, said table containing the frequency of appearance of a keyword and the frequency of appearance of an upper-level category to which the keyword belongs.</u>

5. (Cancelled)

6. (Currently Amended) A program embedded in a storage medium for causing a computer to carry out a keyword frequency calculation method according to claim 4,

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wherein said first ~~text data~~ <u>document</u> extraction module extracts <u>a</u> first ~~text data~~ <u>document</u> from said first database for each of a plurality of sequences entered by the user.

7. (Previously Presented) The keyword frequency calculating method according to claim 2, wherein a frequency of each category in the keyword table is the sum of frequencies of lower-level categories belonging to the category.

8. (Previously Presented) A program embedded in a storage medium for causing a computer to carry out a keyword frequency calculation method according to claim 5, wherein a frequency of each category in the keyword table is the sum of frequencies of lower-level categories belonging to the category.